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for Strategic Management

Program Performance Measurement:
Lessons Learned

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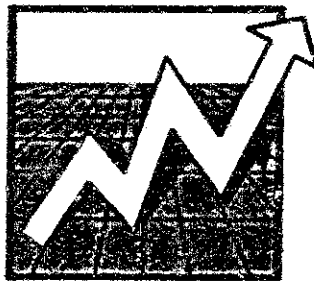May 1994

Program Performance Measurement:

Lessons Learned

Center for Development Information and Evaluation (CDIE)
Bureau for Program and Policy Coordination
U.S. Agency for International Development

May 1994

Performance Measurement

Lessons Learned

Research Triangle Institute

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May 10, 1993

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Performance Measurement Lessons Learned

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INTRODUCTION

This report represents a continuation of work begun by RTI to help A.I.D.'s Center for Development Information and Evaluation (CDIE) review major program themes and associated indicator selection. That review was designed to support meaningful reporting of A.I.D. program performance to the Administrator and, through the Administrator, to Congress.[1]

Initially, the purpose of this task was to develop materials for a CDIE/PRISM Performance Indicators Conference. The materials were to include a compendium of performance indicators used by international development agencies other than A.I.D. and an analysis of the uses of performance indicators for program management and evaluation.

Subsequently, the scopes of both the Indicators Conference and this task were broadened by CDIE to embrace an *Information Use* focus. The purpose of the Conference now is "to develop a shared understanding of actual and intended use of program performance information throughout A.I.D., and the implications of these uses for data collection and analysis."

Among the Conference emphases to which we intend this paper to contribute is "exploring efficient and effective ways to increase the ability and likelihood of using performance information to manage for results throughout the agency." Our particular intent is to explore how other organizations in the U.S. domestic public sector as well as other international organizations manage the use of performance information and the data collection and analysis needed to support that use. Understanding "best practices" in the actual and potential use of program performance information by other organizations may offer practical ideas of benefit to A.I.D. in its effort to "manage for results." A companion study in preparation by Joy Larson of CDIE is looking at how various offices *within* A.I.D. are developing and using performance information.

In this report, we have organized our findings into three major sections. Section I addresses the mandate for performance measurement and its potential role in development management.

Section II looks at the uses and limits of a performance measurement system and at factors that constrain or promote effective use. This section also examines key steps in implementing a performance measurement system at A.I.D.

Section III summarizes key lessons from performance measurement and actions that A.I.D. might take to implement a performance measurement system.

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[1] This paper and the previous work have been funded by the A.I.D. project, Program Information for Strategic Management (PRISM), for which RTI is a subcontractor to Management Systems International (MSI). The views expressed, however, are solely those of the authors and do not necessarily represent the opinions of A.I.D. or of MSI.

I. THE NEED FOR PERFORMANCE MEASUREMENT

A. The Performance Management Mandate

There is increasing recognition that, at all levels of government, effective, performance-oriented program management is needed—management that focuses on program quality and on the results achieved using public resources (Wholey & Hatry, 1992, p. 604).

Current legislation before Congress (S.20, *the Government Performance and Results Act of 1992*, introduced by Senator Roth; see U.S. Congress, 1991) would require each federal agency to establish a performance standards and goals plan and report for each major budget expenditure category. In support of this legislation, the Government Accounting Office (GAO) proposed several actions (a) to support the Congressional intent and (b) to pursue the GAO's own Federal Sector Management objective to develop better measures of agency performance (Britan, 1991).

Considerable investigation and activity has followed, undertaken by the Office of Management and Budget (OMB), GAO, the Department of the Treasury, and other federal government agencies, some of which have begun to develop performance monitoring systems. Meanwhile, innovations at the state and local government level have triggered a number of enthusiastic reports, including the widely noted *Reinventing Government*. The National Academy of Public Administration (NAPA), a Congressionally chartered nonprofit organization, has created the Alliance for Redesigning Government to tie together efforts at the federal, state, and local levels. NAPA is also conducting pilot projects with federal agencies to develop performance measures at both the program and agency level. Annex 1 to this report summarizes the recent history of performance measurement in the U.S. federal government. Suffice it to say here that performance measurement is a timely topic for A.I.D. to consider and that there is a limited, but substantial, body of evidence from other agencies to draw on in making application to A.I.D.'s needs.

In recent years, A.I.D. has come under GAO criticism for "serious and longstanding accountability and control problems." The President's Commission on the Management of A.I.D. Programs (the Ferris Commission) recommended that A.I.D. "install a performance management system that links Agency objectives, annual employee work plans or 'contracts' and employee evaluations." Senior A.I.D. management is committed to addressing these and related concerns. The PRISM initiative is a major avenue of progress in this regard. Setting goals and defining program outcomes, identifying indicators to measure goal and outcome achievement, and documenting progress represent appropriate steps toward "managing for results." Continued application of performance measurement requires even greater emphasis on having managers ensure that results are measured and monitored, and that this information is *used.*

This direction has been affirmed by A.I.D. Administrator-designate J. Brian Atwood who, in testimony to the Senate Foreign Relations Committee on April 29, 1993 stated:

> It will not be business as usual for A.I.D. if I am confirmed. The changes I will be proposing will be radical departures from past practices....I want the people of A.I.D. to take risks in an effort to produce results....I want them to be recognized and rewarded for

the results they produce; and I want them to know they will have a role in defining the way we will measure "results." I am going to propose the entire Agency for International Development as a reinvention lab.

There are particular challenges to successful performance management at A.I.D. Compared to the private sector or even to most public sector agencies, A.I.D. is characterized both by extraordinary program breadth and by the difficulty of measuring client satisfaction. Indeed, it is an enigmatic task even to define who A.I.D.'s clients are—taxpayers, Congress, host country governments, or program beneficiaries.

This report supports A.I.D.'s commitment to performance measurement by exploring lessons learned in other agencies and their potential application to A.I.D.

B. Summary Description of a Performance Measurement System

1. Structure and Uses

Designing the System

Planners must consider carefully how to design a performance measurement system for any given agency or unit. They should keep in mind that it cannot be put in place overnight, and it cannot just be a replica of another organization's performance measurement system. Instead, it must evolve through continuous refinement. Other points to consider: (a) If the information generated is to be useful and pertinent, the objectives of the program must be carefully defined at the outset. (b) Each system should be user-oriented, but the users and the uses will vary, even within a single organizational unit. (c) The system should be capable of measuring quality and results periodically over time.

Specific Uses

Effective performance measurement systems have a number of specific applications. They are used to formulate budgets, allocate resources, motivate employees, improve services, and facilitate information exchange between citizens and government. Performance measurement can also help improve credibility and secure resources necessary to maintain and enhance programs. It should be used for self-assessment and improvement, not simply auditing and monitoring. Similarly, it should focus on how to improve the program, not dwell excessively on individual job performance.

Performance measurement does not effectively estimate the extent to which programs cause observed outcomes. It does not help evaluate the effectiveness of policies or programs, measure linkages, or draw conclusions about cause and effect. On the other hand, performance measurement does realistically estimate expected program outcomes and generally should compare the performance of different units, compare current performance with prior performance, or compare actual results to targeted performance levels (Wholey & Hatry, 1992, p. 605).

Performance measurement enables an organization to judge its own effectiveness in achieving goals and objectives, managing products and services, and obtaining product/service results (customer satisfaction). It is closely linked to efforts to make strategic plans, clarify organizational goals and objectives, characterize decision-making needs, and analyze managers' needs for information.

Focus on Results

Development programs require timely and quality information on their performance and impact. Most reports on development program performance, however, continue to focus on the amount of resources expended and the quantity of services delivered rather than the quality of services provided and the results achieved. As a counterbalance, performance measurement "focuses on program quality and on the results achieved through the use of tax dollars and other public resources" (Wholey & Hatry, 1992, p. 604). Performance measurement asks "What happened?" and "Are outcomes equal to desired results?" It is mainly limited to "end points"—that is, results. It does not answer "Why?" or "What can I do to bring about the results I desire?"

2. Users of the System

Program Managers

The major beneficiaries of performance measurement information should be program managers. Performance measurement should help them understand why their programs are succeeding or failing so that they can modify aspects that will improve program performance. It should enable them to monitor ongoing program performance so that they can learn, improvise, and modify (as necessary) the implementation. Performance measurement flags potential management problems when the indicators do not track in the desired direction. It also can encourage managers to take initiative and to be accountable, and can help clarify for them the expectations and requirements of policy makers.

If the system is to help managers in these ways, however, it requires the participation of decision makers at all levels of the organization. Performance measurement is not "micro-management" but a method for focusing the efforts of managers at all levels on the factors critical to implementing programs successfully. Performance measurement therefore must be consistently defined across all levels of management if it is to be used effectively.

Policy and Decision Makers

Key stakeholders in a program's performance measurement system are the people who decide whether the program can be improved, or even whether it has value and should continue. In this context, performance measurement may best be defined as "the periodic measurement of progress toward explicit short- and long-run objectives and the reporting of the results to decision makers in an attempt to improve program performance" (Poister, 1983, p. 3). Performance measurement provides quality information to decision makers so that they can determine whether their efforts are

on course; it also can inform elected officials and citizens who are entitled to regular reports on the performance and value of programs.

3. Interaction Between Performance Measurement and Evaluation

Evaluation alone measures impacts and tells what produced them. It tells "why" and focuses on "net impacts," the impacts remaining after the influence of other variables is controlled for. Thus, it seeks to point out causal relationships.

Performance measurement includes complementary systems for both measuring performance and analyzing impact. It focuses on effectiveness and efficiency, providing feedback to decision makers. It is concerned primarily with the implementation and ongoing administration of programs, in the realm of management control and management information systems (MIS).

Joining the two in this way is a powerful management approach. In a system that uses both, performance measurement takes routine soundings on the efficacy of the program at multiple levels of management; evaluation is ready to probe deeper to explain causality, to inform policy making, and to adjust programs or to replicate them in other locations.

Key roles of and distinctions between these two complementary elements of performance management in the A.I.D. context are summarized below:

Performance Measurement	Impact Evaluation
Is implementation-oriented	Is policy-oriented
Tracks results	Explains results
Assesses intermediate (manageable) outcomes	Assesses attribution
Focuses on timeliness	Focuses on rigor
Emphasizes multiple-level results	Emphasizes final results
Strengthens accountability for managing for results	Strengthens accountability for results themselves
Informs budgeting	Informs broad resource allocation
Is essential for program implementation and improvement	Is essential for strategy development
Can use disaggregated data	May need aggregated data

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The roles of performance measurement are elaborated in the discussion that follows.

C. The Role of Performance Measurement in Development Management

In a particularly uncertain and changing environment, learning from implementation activities through performance measurement is a *management* necessity if ultimate development objectives are to be achieved.

For purposes of this discussion, a *manager* is someone in a position to make key decisions or take direct action with regard to the activity under investigation. The manager's decisions or actions may affect the current project or program or related future activities. These managers need to base important judgments on good information.

Systems for monitoring and evaluation, therefore, should consider the decision requirements of the managers who must make and implement policy and achieve results through development programs and projects; the results for which they are responsible; what information they need; and when they need it. This information should, of course, be accurate but also must be timely, relevant, and, above all, usable. Unfortunately, concerns for accuracy, independence, attribution, and rigor render much development evaluation irrelevant, ill-timed, or otherwise unusable by those who are in a position to act on it (VanSant, November 1991).

A major lesson from successful experiences with performance measurement is that the link between evaluative information and project or program management should be strengthened. The most important audience for monitoring and evaluation consists of those who have the opportunity to learn from the information and apply that learning to their continuing planning or management tasks. Only in this way can the investment really make a difference for program effectiveness. Forging this linkage also ensures the ready availability of quality monitoring data to support future impact evaluations, because the data needs of the evaluation will be considered from the beginning of program design and be linked to clearly stated goals. Early linkage also forces program designers to be more explicit about what the program is going to accomplish and the role of each management level in achieving appropriate results.

As noted by Britan,

> Different programs, different objectives, different managers, and different audiences all
> require different kinds of performance information. Measuring program performance is,
> in other words, closely linked to processes of strategic planning, the clarification of
> organizational goals and objectives, the character of decision making needs, and the needs
> of managers for information (Britan, 1991, p. 3).

In this context, the most important benefits of a performance measurement system for a development agency such as A.I.D. can be the following:

✓ to strengthen accountability for results at project, program, field Mission, and agency levels;

✓ to improve the basis, quality, and relevance of Congressional oversight;

✓ to target limited resources to the most effective programs;

✓ to focus staff attention on factors critical to the success of the agency and its goals;

✓ to stimulate improved managerial performance at all levels;

✓ to introduce the discipline of relevant benchmarking at all management levels;

✓ to provide performance information to A.I.D. senior management and program managers so that they can gauge the success of their efforts and adjust policies and programs when needed; and

✓ to communicate the value of public programs to elected officials and the public and to gain resources needed to maintain and enhance program operations.

To achieve these benefits, a performance measurement plan should be derived from strategic plans, primarily at the Mission level, where the A.I.D. strategic program planning process is focused. Thus, performance measurement is closely related to the existing PRISM process, which emphasizes the clear definition of Mission goals and objectives, clearly linked program outcomes, and a systematic plan for generating program information. PRISM is especially valuable as a catalyst for overall planning and the concept of a hierarchy of objectives (objective trees). PRISM is less well-focused on measurement of results below the level of strategic objectives and broad program outcomes. It is designed to illuminate progress toward results more than progress toward managing for results. A complete performance management system for A.I.D. will need to build on PRISM but take some additional steps.

In other words, performance measures are more likely to be usable (and, therefore, used) if linked directly to A.I.D. Mission goals and objectives *as well as* the particular management results expected at each level. Moreover, an effective performance measurement system requires real managerial accountability, including real decision-making authority, the human and financial resources needed to support decisions and plans, and an adequate degree of control over contextual factors that affect achievement.

In summary, a performance management system is directly related to a "Managing for Results" approach at A.I.D. An example of the kind of focus toward which a results orientation may lead is provided in the attached text box.

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What Results?

Suppose A.I.D. managers had as their immediate objective to help host governments "reinvent" themselves—in health, in family planning, in education, in agriculture, in public policy, in their own productivity. The ultimate aim would, of course, still be to affect the quality of life, but the immediate aim for which A.I.D. managers could be held accountable would be to help establish host government agencies that work. This approach focuses management attention on the implementing organization and its policy environment, not on an entire sector that is affected by a myriad of factors that the A.I.D. manager and his or her counterpart cannot begin to control.

In a time of declining resource levels, reinvented government may be A.I.D.'s highest leverage strategy if it really wishes to have an impact.

A.I.D. has many competing missions and objectives, internally and externally imposed. An advantage of a core "good governance" mission is that there is likely to be less contradiction between this mission and more political ones imposed by external stakeholders. A large part of A.I.D.'s impact measurement problem comes from confusion of missions; a good-governance mission not only is likely to make attribution easier but also is likely to result in less contradiction between the "substantive" missions and the political missions.

In this context, an A.I.D. manager would, for example:

- engage in entrepreneurial activities such as establishing collaboration among public, private, and third-sector entities to deliver services and create value;

- analyze, with counterparts, the question of how they can solve problems and achieve results;

- establish process analysis activities to specify what processes are critical for results;

- gather benchmark information, such as the time required to accomplish certain administrative procedures;

- use performance information to manage programs and be evaluated on that use (and not necessarily on the impact of the programs); and

- gather cost information on relevant processes.

[Adapted from internal discussion among RTI staff Maureen Norton, Luis Crouch, and Jerry VanSant. These ideas will be expanded in a forthcoming RTI Center for International Development Staff Working Paper, A.I.D. as an Entrepreneurial Agency that Manages for Results.]

II. THE USE OF A PERFORMANCE MEASUREMENT SYSTEM

A. Users and Stakeholders of a Performance Measurement System

Exhibit 1 shows examples of stakeholders at various levels of a hierarchy in both the public and private sectors, along with the kinds of performance information they might need. Note that each level requires the next level down to provide the information it seeks, and that each requires data on outcomes for its own area of responsibility.

The *"public"* is at both the top and the bottom of the hierarchy. Clients and citizens may overlap somewhat but not completely. The private sector has conflicting constituencies in serving both stockholders and consumers; the public sector similarly answers to both taxpayers and service recipients. Citizens are the ones with a voice in driving performance measurement, and clients are the ones who would benefit directly from service improvement or expansion. Clients may also include recipients of other related services that may be affected by changes in the program in question. Information as well as perceptions about program performance inform clients' choices about type and level of service utilization.

Oversight agencies such as Congress and OMB want to know whether the goals of each agency have been achieved and at what cost. They are answering to the taxpayers, who want to be assured that the programs they pay for are effective in doing what they were designed to do.

Top management's critical role is in communicating agency strategy to all stakeholders and actively supporting performance measurement consistent with that strategy. In addition, top management is the key interface with oversight bodies such as Congress and therefore needs to have and report information on overall program performance.

The role of the *department head* in a performance management system is to set and communicate policy on the performance monitoring process, as well as to review and comment on performance reports from each program. A good performance measurement system enables top and unit-level administrators to spot trends, target evaluation resources effectively, and plot long-term strategy.

The four main uses department heads have for performance data are as follows (Hatry et al., 1990):

- to help develop and improve division and development programs and policies, such as which types of clients in which sectors are being served;

- to hold program managers accountable for using performance information;

- to motivate program managers to improve program performance; and

- to help design policies and budgets and justify them to oversight bodies.

Exhibit 1

Hierarchy of Stakeholders for Performance Measurement Information

Stakeholder Type	Public Sector/Private Sector Examples	Performance Data Needed
Citizens	Taxpayers advocacy groups, political leaders, media Consumers, stockholders	Evidence that overall program works and is cost-effective
Oversight agencies	OMB, GAO, Inspectors General, Congressional Committees, Boards of Directors	Overall program impacts and costs
Top management	Cabinet Secretaries, Chief Financial Officers (CFOs) Chief Executive Officers (CEOs), CFOs	Agencywide outcomes/results, costs, efficiency, unit comparisons
Unit management	Bureau Chiefs, Division Directors Vice-Presidents, Headquarters Executives	Unit performance: outcome and financial, efficiency
Program management	Program Managers, Mission Directors Product Managers, Field Operations Managers	Program performance: outcome and process, efficiency, quality
Project management	Project Managers and/or Contractors Field and Line Staff Managers	Project implementation (strategic) Service quality, timeliness, client satisfaction
Project staff	Teachers, health care workers, roadbuilders, planners Assemblers, packagers, drivers, customer service representatives	Project implementation (tactical) Client needs/satisfaction, timeliness
Clients	People in need of food, shelter, employment, education, health care, transportation, safety, etc. Consumers of private goods and services	Information to guide choice and utilization of services

The *program manager* is the primary user of performance information and, therefore, the person with the most critical role in (a) determining what the performance measures should be and (b) setting program targets, ideally by communicating with clients and project staff about their needs and preferences. Each program should also devise data collection procedures, analysis parameters, and report formats. As the persons with the most at stake in performance management, program managers must be directly involved in designing the accountability system as well, including the dissemination plan for reports.

As performance data are reported, program managers are involved in using them in the following ways (Hatry et al., 1990):

- identifying program aspects that have and have not produced satisfactory results, and then in allocating resources;

- examining trends over time and adjusting programs or policies as needed;

- motivating program employees by meeting with them to discuss what each performance report shows (and what it does not show);

- developing and then justifying program plans and budget requests;

- setting program targets for performance indicators for future periods; and

- identifying areas of activity that need more detailed analysis or evaluation.

Especially if performance data are broadly reported and/or used in making resource decisions, *service providers* at the project level have an incentive to improve performance (or at least to manage the selected indicators) and should be involved in setting performance measures for—and interpreting them to—others in the organization.

The potentially adversarial relationships among stakeholders at various levels within a hierarchy, and therefore their different roles in performance measurement use are well-known. In addition, managers at similar levels with different functional or professional orientations may have different interests for performance measurement. Several of the officials we interviewed mentioned such other divisions as executive branch vs. legislative branch, "program people" vs. "financial people," agency staff vs. "performance measurers," and evaluation/policy analysis people vs. management information system people. Specific insights about the roles for performance measurement included: "Program people should be responsible for the design of performance measures, with financial people only facilitating the dialogue and reporting"; and "MIS people don't do analysis. You need policy analysis/evaluation people to do that; MIS folks just get the data and put it in the computer."

Although private sector officials advised against creating a measurement bureaucracy, some public organizations have benefitted from having a *central analysis office* whose role is to establish a schedule for the process, collect data, prepare tabulations for program managers, and ensure data quality and confidentiality.

B. Uses of Performance Measurement: What It Can Do

There is no dearth of arguments for the importance of performance measurement in strategic management. As Cannon and Fry of the National Accounting Office of the United Kingdom quip: "what gets measured gets managed" (Cannon & Fry, 1992, p.3). It is simply good management practice to find out how well you are doing and to use this information for program planning, implementation, and improvement. A key assumption of this argument, of course, is that performance measurement makes such good sense that if the tools to do it are available, they will be used: "If you build it, they will come."

Our survey of non-A.I.D. agencies, however, found that the documented use of performance information in development management is rare. We found several examples of performance measurement systems in the process of being developed, such as at the World Bank and the United Nations Development Programme, but few concrete examples of managers routinely using performance information—especially information on program results—to manage programs. This finding agrees with a recent assessment from the National Accounting Office of the United Kingdom:

> ...it is clear from research that public sector performance measurement is still very much in an evolutionary state. Thus, there are few countries that could justly claim to use performance measurement consistently as a tool for making policy and operating decisions and for improving public sector management practice" (Cannon & Fry, 1992, p.1).

In fact, getting managers to actually use performance data to manage their programs was cited by virtually everyone interviewed as the major challenge—or weakness—of the performance measurement process. As one seasoned analyst observed, "developing performance indicators is a sideshow to the main issue—how do you get good people in positions who really want to manage and will use performance data?"

This finding may reflect the general pattern of utilization found in evaluation research. Contrary to earlier indictments of program evaluation that it was at best ignored, current thinking has broadened considerably:

> Today, the concept of use encompasses evaluations constituting decisions, playing a joint role in constituting decisions, being cited in debates, being used in in-service training of professionals, being used in educating future practitioners, and being used to reconceptualize social programs and problems. The agent of influence is no longer a single evaluation report presented to formal decision makers (Shadish, Cook, and Leviton, 1991, pp. 450-451).

Perhaps the use of performance measurement in development management is similarly diffused and indirect. This would not be surprising given the fact that managers at different levels of an agency have different responsibilities, information needs, and capacities to use performance information. Moreover, since one agency-wide set of performance indicators is unlikely to be equally useful to all managers (Britan, 1991, p. 3), other influences and information will compete for attention in the decision process.

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While Harry Hatry may be right in asserting in our interview with him that there is "no clear pattern of use," our review of agency reports, published articles, and conversations with a variety of managers uncovered a plethora of recommended uses for performance data. Most of these suggestions come from U.S. domestic agency experience, but there were also several examples from development agencies located in the U.S. and overseas. The various categories of use are listed in Exhibit 2.

The use for *strategic planning* emphasized clarification of program goals and objectives and the "logic" of the program. The process of thinking about performance measurement as part of the strategic planning process forces greater specificity and attention to critical program assumptions about relationships and causal paths. There was also an emphasis on building performance measurement into program design rather than having it added later as a compliance requirement that engenders little enthusiasm.

Performance data can inform resource allocation decisions. Several of those interviewed stressed the importance of making *performance accounting* an integral part of the budget process. Managers would have to account for expected program results in their budget requests and justifications. One popular notion is to use performance data as a means to shift scarce budget resources to more "productive" (i.e., greater payoff) areas. The danger of this strategy, as we point out in the next section of this report, is to shift prematurely before a program has had sufficient time to reach its promise.

Performance forecasting and *early warning* complement each other. Performance forecasting looks for trends in performance indicators promising future performance that could be used for planning. For example, a strong increasing trend in immunizations may suggest a decreased future need for primary care services. The early warning is a signal that something either needs to be looked at

more closely or requires immediate action. The early warning signal may also suggest a way to improve a program, as when it reveals a breakdown in service delivery operations.

Performance data can guide *program implementation*. Timely data on the organization and efficiency of service delivery processes is critical for keeping the program moving forward in the right direction and for making needed in-course corrections. Service coverage data, for example, may reveal that program services are missing the intended target population (e.g., low-income families). This would be an example, as well, of the use of performance data for *program improvement*. The data can be an effective tool both for identifying areas needing improvement and for suggesting what should be done. In the example of low-income families, the data showing them being overlooked by the program may also argue for (a) more extensive outreach to get them into services and (b) potent incentives (e.g., food coupons) to keep them returning.

Program results stress measuring what a program has achieved, not just what it has done. Program impacts can be compared to performance in other units, prior performance, or targeted performance levels. The results data may also be used for *accountability* purposes, to discover if the program is accomplishing its mandated goals and objectives. The accountability analysis may be extended to program coverage, service delivery, fiscal integrity, and legal compliance.

Program marketing is an extension of "program results" to satisfy external audiences. The performance data can be used to communicate the value of a program to elected officials and the public, in search of support. In addition to gaining resources for the program, some cite this tactic as an effective way to strengthen public confidence in government programs. The obvious danger here is "overselling" a program by claiming results stretched far beyond the data.

Benchmarking was cited as a way to improve programs by "learning from success." Comparative performance data from different units delivering the same services (e.g., schools, sanitation crews) can be used to identify good performers and learn from their experience to improve the performance of the other units.

Several sources noted the potential for performance measurement to create *performance incentives* for managers by tying their use of performance measurement for program management to their pay raises. Managers would be held accountable for obtaining and using performance data to understand why their programs are succeeding or failing. A manager may not be penalized for a breakdown in program implementation; on the other hand, she or he could legitimately be cited for failing to anticipate implementation failures through the routine use of performance data that tracked progress and flagged serious problems.

The incentives idea has been extended by some to include service delivery competition. Under this scheme, comparative performance measures could be used to determine which units were more efficient or effective and the units could then be rewarded accordingly. The perils of this approach are discussed in the next section, under potential misuses of performance measurement.

Quality management stresses customer satisfaction as a key performance indicator. Several interviewees suggested collecting information from intended program beneficiaries both as a way to

find out if and how the program is improving their lives and to obtain clues for program improvement.

Finally, it was suggested that performance measures could be used in *performance contracting*, serving as "performance standards" for agency contractors. These standards would be built into contracts for services and contractors would be held to agreed-upon performance levels. This type of arrangement would have to be carefully monitored to avoid the threat of corrupted data.

C. Misuses of Performance Measurement: What It Can't Do

Our survey of performance measurement practice also turned up some potential misuses of performance measurement data that could weaken their utility as a means to strengthen development management and improve public sector programs. These issues are presented in Exhibit 3.

Exhibit 3

Potential Misuses of Performance Information

✓ Reaching for Causal Relationships

✓ Rushing to Measure

✓ Reliance on the Easy-to-Measure

✓ Mega-Indicators

✓ Naive Comparisons

✓ Big Stick Approach

Performance measurement is not a substitute for a rigorous evaluation designed to estimate program impacts and tell why they occurred. As Wholey and Hatry point out, "Performance monitoring systems generally do not provide information on 'causality,' nor are they intended to" (Wholey & Hatry, 1992, p. 608). Users of performance data need to be alert to their inherent limitations, such as the lack of valid comparison conditions and mis-specification of other influencing variables in the program setting. They need to resist *reaching for causal relationships* with performance data alone. On the other hand, when it is coupled with a strong evaluation design, performance monitoring is a powerful means to track and understand program results.

Development projects generally have a maturation period before they can produce results. The program "theory" should pinpoint the length of that period, and help calibrate the performance measurement process so that information can be collected at the appropriate time. *Rushing to*

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measure through premature data collection and interpretation will only mislead by undervaluing the program's accomplishments.

There is always the temptation to use data that is the least costly to collect. But cost-effective data collection is not synonymous with cheap data collection. Cost-effective data are the best data at the lowest cost. One person we interviewed said that his agency was only using data they could collect without any staff burden; he perceived that agency staff simply would not provide any data for performance measurement. But are these data worth collecting, regardless of the cost? As several sources point out, cost is only one criterion. Many others are equally important, such as reliability, accuracy, timeliness, and security. Obsession with cost alone may produce data that no one will believe or pay attention to.

The *mega-indicator* problem follows from the "one size fits all" approach to performance measurement. Several people cautioned against assuming that a whole agency could be characterized by a handful of highly aggregated indicators. Yorke (1991) cautions persuasively that the performance measurement system has to take into account the information needs of managers at different levels of the agency. The managers will be most sensitive to measures that directly relate to their level and likely pay little attention to those measures more distant from their management responsibilities. Similarly, one agency cannot simply adopt the performance measures of another agency; the measures appropriate for an agency must reflect directly that agency's unique mission, objectives, and organizational structure.

The *naive comparison* problem is fairly obvious. It results from the weak, generally unsupported assumption that all programs bearing the same label (e.g., child survival, policy reform, democratic initiatives) are the same and, therefore, can be readily compared to one another. A variant of this belief is that all countries in the same region can be compared directly. The problem, of course, is that the uncritical comparisons completely ignore the contextual factors that make countries unique and different and that influence program effectiveness.

One of the most common criticisms of performance measurement is its use to punish programs or staff for sub-par results. Many claim that this *"big stick"* approach is the main cause of resistance to performance measurement. In this approach, the whole exercise is cast in the negative, as a search for evidence to downgrade the program and staff; rather like a surprise visit from *60 Minutes*. No wonder there is so much legitimate concern for the corruptibility of performance data under conditions where these data may determine program survival. One way to offset potential negativity in the process is to encourage managers to provide detailed explanatory information along with the performance data. This will enable them to place the data within the context of the program's unique operating environment and offer reasons for the observed results.

D. Factors Promoting the Effective Use of Performance Measurement

As suggested earlier, we found plenty of guidance for how to promote the use of performance data in development management. In addition to our interviews and reviews of agency reports and articles, we found several helpful suggestions in the evaluation research literature, including empirical studies on utilization of evaluation research.

For presentation here, we organized these suggestions into four categories of influences that could affect the eventual use of performance data: the agency environment, the characteristics of the potential data users, the data production process, and the characteristics of the data. These four categories are displayed in Exhibit 4.

Exhibit 4
Categories of Influence Affecting the Use of Performance Data
Agency Environment
Integration into agency strategic plan Early, visible senior management support Demand-driven performance measurement Understanding of the purpose of performance measurement Link between data and decisions (budget, program) Performance information broker Performance feedback
Data Users
Skills and resources (time, staff, budget) Management responsibilities Positive incentives
Data Production
Total agency involvement No measurement bureaucracy Standard definitions Cost-effectiveness Data quality control (data audits) Routine review and improvement

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Data Characteristics

    Results focus
    Limitation to a few key areas
    Relevance
    Timeliness (on time, enough time)
    Credibility
    Minimal data burden
    Absence of threat
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It is critical that the performance measurement be viewed by managers as an integral part of the agency's mission and strategic plan. Often it is not; instead, it is seen as an adjunct to the plan, in the same way that evaluation is seen as a requirement to be satisfied after the more important work of running the program is done. This requirement presumes, of course, that the plan's strategic objectives (a) are meaningful relative to what the agency is actually trying to accomplish and (b) are expressed with sufficient precision to allow assessment of whether they are being achieved.

Performance measurement should be built into program and project design so that questions about performance measures will be asked along with questions about program content. It also requires senior agency management support, at the program design stage and forward. The most visible way for this support to occur is for senior managers to be actively involved in the design of the performance measurement system instead of passing this task off to lower levels of the agency and then remaining aloof from the process.

Senior managers can also make sure there is a clear understanding throughout the agency of the purpose of performance measurement, the reasons it is critical to the agency mission and strategic objectives, and the planned uses of the data for management decisionmaking at all levels of the agency.

The emphasis on agency-wide use can be strengthened by creating a demand for performance data rather than simply assuming that if they are available, they will be used. Not so, say the experts: there has to be a direct link between data and decisions. Managers throughout the agency have to believe in the value of routinely using performance data to manage their programs and projects and, moreover, accept that their performance as managers will be evaluated in large part on this basis.

Another potentially important way to promote use is by having an *information broker* in the agency. The broker would be a repository of agency information on performance data and would make sure that the data are readily available to managers when they need them. The broker can also promote feedback of performance results to program staff, especially those that may have been involved in generating the data. One of the most frequent complaints from staff is that "we send off the data we are told to collect and never hear what happened to it." The information broker could document the use of performance data and communicate back to the data producers to strengthen their commitment to providing good data.

One of the weakest assumptions of performance measurement is that development managers know how to use performance data to manage their programs. Various sources pointed out that insufficient experience, training, and resources (e.g., time, budget) of managers often greatly constrain their effective use of perf..nance data. Many need intensive training and other technical assistance (e.g., software) to make good use of the data. Others simply do not have the time or staff resources to use the information. That is why several of the people interviewed cautioned that successful installation of a performance measurement system in an agency is, at minimum, a 3- to 5-year process that entails considerable group facilitation, negotiation, and training.

As we pointed out in the previous section, performance measurement should be keyed to the different levels of the agency so that managers have access to information directly relevant to their immediate management responsibilities. This advice presumes that a manager has more incentive to deal with matters over which he or she has some degree of direct control. The manager of a water purification project, for example, is likely to be more interested in the "gallons of water treated per day" than with how this project is part of an "infrastructure development" program that, in theory, contributes to country-wide economic development.

We also noted earlier the importance of positive incentives. It was frequently mentioned that *managers should be evaluated for their use of performance information to manage their programs, and not necessarily for the actual results of the programs.* This argument assumes that they may have little direct control over results, but surely can develop and use performance data to document what the program is doing and how well it is progressing toward its objectives. These positive incentives can focus on reinforcing the use of good management practices.

Many of the points in Exhibit 4 relevant to data production stress the need to involve the total agency instead of having upper levels of management delegate the responsibility to some lower level, merely as a bureaucratic home for it. For example, the private sector's strongest recommendation to the federal government was "don't create a measurement bureaucracy." All affected managers must be involved.

A concern was expressed by some respondants that those responsible for producing the data may have little contact with those responsible for using the data. This situation is more serious the higher up the agency one goes, where senior management may have no direct contact with staff who are both defining performance indicators and generating the data for them. This disconnection results in data users who do not fully understand what is behind the numbers they are given to use, and data producers who have little appreciation for the management issues facing senior managers for which performance data would be useful.

With tightened agency budgets, it is important that managers view the data production process as cost-effective, providing the best information for the least cost. As examples, costs can be limited by using existing data whenever appropriate and by employing creative sampling strategies. A complementary incentive is the managers' perception that the direct benefits to them in using performance data equal or surpass the cost of collection. They have to experience the benefits in better management of their programs.

Finally, a critical part of the production process that will promote use is confidence in the quality of the information. This is why every performance measurement system should have built-in data quality control checks to safeguard the reliability and accuracy of the data through routine data audits. As one senior manager cautioned, "when you create a situation where performance measures drive the system, watch out. Especially in a decentralized system, there is less direct accountability, and more room to work the numbers."

In Exhibit 4 under data characteristics, the emphasis on measuring results, not just processes, reflects the popular *Reinventing Government* argument that performance measurement should focus on what programs are accomplishing, especially the "people impacts." In other words, we know a lot about what programs are doing; we just do not know if they are doing any good. The A.I.D. admonition to "focus and concentrate" captures the point made by several sources to limit the performance analysis to a few areas that are directly relevant to the agency mission and strategic objectives. Otherwise (as noted earlier), the agency risks overloading managers with numbers that they may not have the resources or the background to use effectively.

A final, frequent recommendation is to use nonthreatening data. Simply telling managers to report data on their programs without actively involving them in the performance measurement process from the start, without explaining how and by whom the data are going to be used, and without assuring them that the data are not going to be used to evaluate them personally, is bound to be threatening. This compliance mode of measurement not only will minimize the possibility of manager "ownership," but also very likely will produce bureaucratic resistance and, worse still, lead to data corruption.

Of all of the above suggestions for promoting the use of performance measurement in development management, the two most important are (a) highly visible senior management support for the process and (b) total agency involvement in the design and implementation of the performance measurement system. These may seem like rather obvious points, but they were routinely cited as essential but missing from current A.I.D. initiatives.

E. Examples of Effective Use of Performance Measurement

Although regular, effective use of performance measurement is rare in the development management context, there are several good examples of its use in the management of U.S. local, state, and federal governments, as well as in the private sector. Exhibit 5 shows examples of how performance measurement has been applied in each of these settings. The text below describes these and other examples in further detail.

1. Local Government

U.S. local governments have used outcome-oriented performance monitoring systems for decades, especially in large urban areas. Poister and Streib (1989) note that in 1988, two-thirds of jurisdictions surveyed reported having performance monitoring systems, especially in police, fire,

Exhibit 3

Examples of the Use of Performance Measurement

Organization	Sunnyvale, California	Minnesota Trade Office	Internal Revenue Service	Ireland Social Welfare Services	General Electric Corp.
Setting	Local Government	State Government Agency	U.S. Federal Government	U.K. Federal Government	Private Corporation
Sector	All	Economic Development	Finance	Social Services	Private
Performance Users	Program managers Department heads City council	Program managers Department heads State officials Local officials	Program staff Bureau chiefs	Program staff Branch managers Senior managers	Dept. managers Top managers
Types of Use	Perf. accounting Perf. forecasting Perf. incentives Perf. contracting	Pgm. marketing Perf. forecasting Program results	Pgm. improvement Quality mgmt.	Program results and improvement Early warning Accountability	Pgm. marketing Quality mgmt. Strategic planning
Types of Data Collected	Costs Outputs Citizen satisfaction	Service quality Interim outcomes End outcomes	Service quality Outcomes	Results vs. targets Timeliness Client satisfaction	Customer satisfaction Timeliness
Results of Use	Program changes Productivity gains	Redirection of funds	Program changes	Productivity gains	Program focus

solid waste, public transportation, health, and social services. Workload or output measures were most commonly used, followed by citizen satisfaction measures; efficiency measures were less prevalent. About 30 percent of the 283 reporting jurisdictions found their monitoring systems very effective. In addition, over two-thirds of U.S. cities of 100,000 or more used financial trend monitoring and/or strategic planning (Poister & Streib, 1989).

The leader among local governments in the use of performance measurement is Sunnyvale, California. Each program area has goals, community condition indicators, objectives, and performance indicators. For example, the landscaping department might have the following measures:

Goal:	Provide and maintain attractive, healthy trees, shrubs and natural ground cover in public areas throughout the city.
Community condition indicator:	Ten percent of trees and shrubs are lost each year to drought, storms, or neglect.
Objective:	Maintain trees and shrubs in a healthy state with a loss factor of no more than 5 percent.
Performance indicator:	The percentage of trees needing replacement that are replaced within two months.

According to City Manager Tom Lewcock, Sunnyvale's city council sets policy, such as what level of service, how many units will be produced, at what unit cost. "[They do] not know how many people work for the city, nor do they really care....There is no approval process for hiring people around here; management does it" (Osborne & Gaebler, 1992, p. 145). Sunnyvale also has a bonus system for managers of units that exceed their service objectives for quality and productivity. Finally, the city has developed a four-part Municipal Performance Index that measures its effectiveness and efficiency each year and that allows it to track productivity changes over time. Between 1985 and 1990, productivity increased about 4 percent per year, and in 1990, Sunnyvale was using 35 to 45 percent fewer employees to deliver services than other cities of similar size.

2. State Government

Using performance measurement in *state economic development programs* was pilot-tested by the Urban Institute in Minnesota and Maryland. The system was designed to provide regular feedback on service quality and outcomes for six major program areas: business attraction, business assistance, financial assistance, tourism promotion, export promotion, and community development assistance. Each program developed a description of its scope and objectives, then determined quality, intermediate, and long-term outcome measures of progress toward these objectives. The performance measures were constructed from multiple sources of data, including program records, client surveys, state unemployment insurance data, and other explanatory data. Each program also specified how the data would be reported and disaggregated in analyses of program performance, such as by community characteristics.

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Two specific examples of how performance measurement data have been used in improved management of Minnesota's economic development programs follow (Hatry et al., 1990, p. 186).

- After performance reports showed that export promotion programs were serving low numbers of nonmetropolitan businesses relative to their demand for services, the Minnesota Trade Office initiated a strategy to meet these clients' needs better.

- The Star Cities program, which provides technical assistance to local economic development agencies, used performance data to revise its program manual and to develop its annual work plan.

The *Illinois Department of Public Aid* has developed performance measures for nursing home reimbursement. It uses measures of patient satisfaction, community and family participation, and the quality of the nursing home environment in nursing homes to set ratings, which it then uses to set reimbursement levels: "a six-star rating is worth $100,000 a year more than a one-star rating" (Osborne & Gaebler, 1992, p. 139). This department used to reimburse nursing homes for Medicaid patients according to the intensity of care provided, which served as an incentive for nursing homes to keep bedridden patients rather than fostering independence as state policy intended. The new measures focus on outcomes rather than inputs. In addition, the ratings are published to allow consumers to choose nursing homes based on quality of care.

The *State of Louisiana* began in 1989 to implement a comprehensive strategic management process that integrates policy development, strategic and operational planning, budgeting, and accountability. This effort has involved redesigning systems and procedures to support the state's strategic plan as well as extensive training of agency managers. Missions, goals, objectives, and performance measures are developed in the context of a 4-year strategic planning horizon. Budgets are developed out of annual operating plans based on the strategic plan. Managers are held accountable for annual performance plans through progress review meetings with the commissioner of administration (held before agency budget requests are submitted). In 1990, the state passed a law formalizing the participation of both legislative and executive branch managers in developing performance measures. Conferences of staff from both houses of the legislature, the governor's office, the administration department, and the relevant department meet to develop indicators and measures for use in planning and budgeting (U.S. GAO, 1993).

3. U.S. Federal Government

All federal agencies under the proposed new law (the Government Performance and Results Act) will establish a performance standards and goals plan. Each agency will submit to the President and Congress a report detailing program performance for the previous year and three prior years, relative to previously established measurable goals, broken out by department and major expenditure category. If goals are not quantifiable, the agency must describe a "minimally effective program" and a "successful program" with sufficient precision that would allow for an accurate independent determination of whether the program's performance meet the criteria of either description. Moreover, Congress will not be allowed to consider any authorization or appropriations bill unless it first specifies measurable performance goals for the agency or program in question.

Many federal agencies have begun to develop various types of performance measures as part of the reporting required under the CFOs Act (see Annex 1 for further discussion of this Act). Exhibit 6 displays the numbers and types of performance measures that 21 federal agencies, including A.I.D., have provided in their FY 1992 financial statements to OMB. Output and outcome measures are the most commonly reported types of measures; effectiveness measures are the least prevalent among these agencies.

The *Federal Bureau of Investigation (FBI)* is among the most experienced users of performance measurement systems. Prior to 1974, the FBI used measures such as the number of arrests, convictions, fines, and recoveries to allocate resources and evaluate employees. However, management recognized that not incorporating quality or complexity into these indicators sometimes resulted in perverse allocations of manpower; e.g., "the arrest and conviction of two petty car thieves appeared to represent performance superior to the arrest and conviction of a major criminal figure" (Sonnichsen, 1987).

After a successful one-year pilot project (1974-1975) in four field offices to emphasize quality over quantity in investigations, the FBI formally introduced a policy change instructing all field offices to focus their efforts on the "major criminal and security problems within their respective territories." With overall guidance from headquarters about national priorities, each office now establishes priorities and a limited number of targets. The intent (and result) has been to focus on operations that have the greatest impact on the American public.

Reacting to internal and external criticism that the new approach made overall performance difficult to evaluate, the FBI implemented a Resource Management Information System (RMIS) in 1978. RMIS monitors time expended by agents in each investigative category. Some of these categories are designated as priority cases according to their magnitude (e.g., lives or dollars at stake) and significance (e.g., organized crime and white collar crime are more critical than employee security or fugitives). The RMIS is used agencywide to assist in setting resource priorities to coincide with major crime problems (particularly those not addressed by state and local forces) and to ensure that agents are productively employed.

Department of the Treasury strategic goals are set at the highest level. Then about three strategies are developed for each goal. Strategies are disseminated to the bureaus, which then develop action plans and milestones to achieve each strategy. Each bureau develops its own long-range plan, budget initiatives, and performance measures. The measurement system is developed at the staff level, and top-level bureau managers review progress toward the goals. Sometimes the bureaus turn to the Department in setting priorities, especially when they have conflicting missions.

For instance, in measuring both efficiency and accuracy of customer service, the Internal Revenue Service (IRS) used to count the number of customer service calls that got through as one performance measure, the number of correct answers as another. After using them both for a while and seeing no increase in the percentage of correct answers, the Department decided to eliminate the first measure. It decided that a call that got through but resulted in giving the caller the wrong answer was not a desirable objective to work towards (U.S. Dept. of the Treasury, 1992).

The IRS is farthest along of the 12 Treasury bureaus in the process of performance measurement. It has developed a 5-year strategic plan and a 1-year operating plan that ties into it, with actions and milestones to monitor progress toward strategic goals. For example, the IRS's objectives are to: increase voluntary compliance, reduce taxpayer burden, and improve quality-driven productivity. The bureau has five strategies tied into these objectives: Compliance 2000, Total Quality, Tax Systems Modernization, Diversity, and Ethics. Finally, it has 12 corporate actions planned for 1993 that map to these strategies.

The Department of Labor, *Employment and Training Administration (ETA)*, has linked performance monitoring to program evaluation. They use performance monitoring data to plot trends in the operation and impact of the Job Training Partnership Act (JTPA) program, and they use evaluation to help interpret the performance data. For instance, they use data from randomized evaluations showing the impact of the program on different population groups to verify and round out the picture provided by performance data at the state and local levels. In addition, process analysis is coupled with performance data to examine organizational arrangements and the dynamics of state/local program implementation. ETA's approach recognizes the manipulability of performance data to make a program look good, and uses evaluation to investigate program operations more thoroughly and selectively. Combining performance measurement into the same office as program evaluation has helped promote the use of the data.

The JTPA program also uses performance contracts to determine reimbursement levels. The number of people placed in jobs (not the number of people enrolled in the program) determines the level of payment to each training vendor (Osborne & Gaebler, 1992, p. 141). When first introduced in the early 1980s, these contracts led to accelerated placement, or "creaming," of the most job-ready; however, current performance measures reward attention to the more needy populations.

The FBI, IRS, and JTPA cases are three of many examples that illustrate how the development of performance measures is an evolutionary process involving periodic reexamination and refinement:

> This pattern—adoption of crude performance measures, followed by protest and pressure to improve the measures, followed by the development of more sophisticated measures—is common wherever performance is measured....All organizations make mistakes at first. But, over time, they are usually forced to correct them (Osborne & Gaebler, 1992, p. 156).

4. Private Sector

Based on 41 respondents to a Treasury survey, the *U.S. private sector* enjoys widespread use of performance measurement. Respondents reported generally high satisfaction with the use of performance measures for the following four purposes: (a) to make budget decisions, (b) to manage products and services, (c) to assure accountability, and (d) to measure results.

The corporations surveyed recommended using financial and efficiency measures to make budget decisions and ensure accountability; using quality, customer needs/satisfaction, and timeliness measures to gauge service effectiveness; and using all types of measures in managing services. Satisfaction with performance measurement systems was especially high among companies that

disseminated their measures throughout the organization and among those that linked measures to the execution of their strategic plans.

5. Other Countries

A recent GAO study of the experience of other countries with performance management notes that the U.S. is not alone in attempting to address major management problems. The study notes that "Governments in countries such as Australia, Great Britain, Canada, New Zealand, and Sweden began in the mid-1980s to rethink how their public sectors operated and to create a more results-oriented environment" (GAO, December, 1992, p. 15).

The results of initiatives in these and other countries do not lend themselves to comprehensive assessment because most are still in their early stages. However, the GAO notes, early results are encouraging. The public service in several countries governments has been energized to act and government operations have changed substantially. Furthermore, the GAO notes, the creation of results-oriented government has been directed "primarily from the top by a committed cadre of managers" (GAO, December, 1992, pp. 19-22).

Cannon and Fry (1992) offer two specific examples of the use of performance measurement in the United Kingdom.

Northern Ireland's Social Welfare Services Office has a performance information system that serves information needs at multiple levels. The development process started with a one-day seminar in which managers met with top management to establish a set of six key objectives. These are to: deliver services with minimum delay; foster client-oriented services and attitudes; provide adequate information to clients; develop appropriate management systems; develop adaptable, cost-effective systems; and control abuse of services.

At the branch level, managers develop their own annual plans and targets under each of the six objectives. Managers' flexibility is limited only by the requirements that targets be action-oriented, reasonably quantifiable, and specific about time frame. Most managers also involve staff in target setting. Some emphasize existing initiatives; others use targets as an impetus for new developments. The managers have found that "putting down targets in print makes them think more about what they are doing and increases their commitment to meeting those targets" (Cannon and Fry, 1992, p. A-9). Each branch produces and uses its own statistical reports that allow managers to monitor progress toward these targets.

In addition, the central office's Management Services Unit compiles monthly data on several timeliness indicators for all branches, including: the average length of time to clear new claims; the length of time taken to clear 90 percent of new claims (assuming the final 10 percent are the the most difficult cases); the number of parliamentary questions and representations received, and the length of time taken to answer them. This information, all computerized, is used to compare performance over time and across branches, is readily accessible by all managers, and is used regularly by branch levels as well as senior management. The system has led to increased productivity: claims processing time has decreased by as much as 25 percent in some branches.

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Target achievement and timeliness statistics are brought together to produce a quarterly report on branch achievement that is widely circulated. The quarterly report is the primary feedback mechanism for performance information office-wide, although top management usually only gets involved when a report indicates a pattern of poor performance.

The *United Kingdom Customs and Excise Department's* performance measurement systems links its planning, budgeting, and accounting systems. Each system compiles data on resources, workloads, results, outputs, and performance indicators, by activity, and compares outputs against plans and targets. The performance indicators include economy, efficiency, effectiveness, and quality-of-service measures. Targets are set in terms of national aggregate results, previous years' results, input reductions, and calendar deadlines. The department's overall plan is translated into collection management plans, operational unit plans, and district plans for use by field offices. These reflect the board's priorities and objectives as well as local objectives and concerns.

The computerized system allows the direct input of data via remote terminals, allowing quick-turnaround reporting of consistent measures across all offices. The reports that the system generates are geared to each management level. For instance, the board receives a monthly report with high-level, aggregated output and performance data, which it uses to compare national results against targets and key indicators. Top management receives "exception reports," which highlight areas of concern and unusual results. Program managers in each office receive detailed information on manpower utilization, resource costs against budgets, workloads, activity levels, outputs, and performance measures by activity.

F. Implementing a Performance Measurement System for Development Management

Unfortunately, there is little empirical information available from international development agencies about the results of implementing performance measurement systems of the sort discussed in this paper. Many, however, are *talking* about performance measurement, accept its potential value, and are beginning to implement it to one degree or another.

For A.I.D. field Missions, ongoing use of a performance measurement system should be incorporated into Mission procedures for program and project planning and review, contractor management, and reporting. If the Missions prepare Action Plans or their equivalent, these plans should be results-oriented documents rather than annual operational work plans. The process of selecting or refining program objectives, defining management results, selecting indicators, analyzing progress against these indicators, and determining necessary management actions to implement effective performance measurement, could, in fact, serve as the basis for an Action Plan.

This procedure should involve host government counterparts and contractors to build understanding, consensus, and commitment to common goals. To the extent possible, needed data collection should be built into the information systems of projects and managed by project implementation teams, preferably with the involvement of host country agencies. Project monitoring and evaluation plans and scopes of work should explicitly address the information needs of performance measurement (as well as broader PRISM program information requirements).

Project reporting and review procedures should be used to document and discuss the results of performance measurement. Quarterly project implementation reports to A.I.D. also could discuss progress toward performance targets. As with annual work plans, project managers should be required to document - how implementation is achieving performance targets.

Routine reporting should be supplemented by a semiannual review devoted specifically to performance measurement. At this review, the assigned managers for each level of results can review progress against the established indicators and recommend any necessary management actions to be taken within related projects. Contract team Chiefs-of-Party and government counterparts should be encouraged to participate.

A product of this review meeting should be a specific list of decisions made, actions required, person responsible for each action, and the expected result of each action.

Periodic program or policy reviews with government officials should be used as an occasion to build local commitment to needed actions and to solicit local views on how to improve program performance. This process can be seen as part of the Mission's institutional strengthening agenda with counterparts.

An Implementation Sequence

I.   Secure top management support (to gain needed resources and time)

II. Obtain mission (or other unit)-wide agreement on and commitment to program goals and objectives and outline the program design

III. Establish organizational structure with clear responsibilities to develop the system; assign individuals to manage performance measurement for each objective

IV. Allocate resources based on strategic plan

V.   Identify program users and customers and discern their needs (Congress, executive branch policy makers, A.I.D. policy and evaluation staff, program managers, press and public)

VI. Given objectives, define results and determine most suitable performance measures

VII. Identify data sources and assess their availability, quality, and appropriateness

VIII. Select appropriate performance indicators and measures and set targets (input, output, process, outcome, impact)

IX. Establish the performance measurement system (establish responsibility for each program; assign responsibilities for establishing performance indicators, data collection, and report formats)

Reviews and discussions of formal project evaluations provide another opportunity for discussion and analysis keyed to the Mission's overall strategic agenda. Such interactions will help transform evaluations from a required exercise (whose findings often come too late to use) into an opportunity for management to expand the degree of analysis available to inform issues significant to the Mission's future programming.

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To facilitate performance measurement and reporting, data collection, data management, and analytical reporting should be written into project contracts and included in annual work plans prepared by implementation teams. Contract staff usually have the most direct access to data sources, know what is available, understand data reliability problems, and can carry out routine information management tasks as part of their assignments (VanSant, February 1991).

1. Linking the Information Hierarchy to the Management Hierarchy

Just as organizations are structured hierarchically to manage people and resources, organizational objectives also tend to be structured hierarchically, reflecting the cause- and-effect logic necessary to achieve broader program goals. The kind of performance information needed, the type of performance being assessed, and the character of useful performance indicators also vary dramatically for different objectives at different organizational levels (Britan, 1991).

Activities conducted and results achieved at lower organizational levels are necessary, but not necessarily sufficient, inputs to achieving higher-level goals. The relationships among program objectives (and the need for performance information) can often be clarified by depicting performance objectives in a hierarchical "objective tree" as supported by the PRISM process. The objective tree graphically describes the overall program logic.

Linking the concept of managing for results to the objective tree suggests the importance of developing performance contracts between management levels that define program objectives and expected results, and for which managers can be held responsible. Good performance standards are realistic estimates of expected outcomes. They should be easily understood and agreed to by both those who will judge the success of policies and programs and those who will be held accountable.

Decentralization of program management can be based on these performance contracts, avoiding micro-management and freeing executives for strategic decision making, as well as clarifying responsibilities and decision authority of subordinates. The results can be more rational decision making based on clearer program objectives, comparative program performance data, and better understanding of program alternatives. There also is a better basis for performance-based budgeting, rewarding programs that achieve results.

Managers should be held accountable for obtaining and using program performance data, for understanding why their programs are succeeding or failing, and for making appropriate changes to help their programs work better. *They are responsible for managing for results but are not necessarily responsible for the results themselves* (Britan, 1991).

2. Indicators

PRISM staff as well as a wide range of evaluation and performance measurement experts have examined the question of appropriate indicators. A summary of lessons learned suggests that indicators should:

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✓ be grounded in both acceptable practice and substantive theory (a balance between what *can* be measured and what *should* be measured);

✓ be policy sensitive, so that analysis yields transparent policy implications;

✓ be specific and sensitive enough to reveal those changes being measured that are attributable to management action;

✓ directly measure the relevant performance target;

✓ enable cost-effective measurement, preferably using data from Mission project or performance measurement or secondary data collected regularly by a host government or donor agency);

✓ promote *timely* measurement of management results;

✓ have significance for a wide range of relevant audiences, including local managers and external stakeholders; and

✓ be open to revision, if appropriate.

Indicators can be used to measure discrete activities, categories of activities, or all program activities. At higher management levels, emphasis is on program impact in achieving broader objectives, with senior managers relying primarily on aggregated and summarized data on program inputs, outputs, and outcomes across discrete activities and sites (Britan, 1991).

Establishing relevant comparisons or benchmarks for each indicator is, of course, an important part of the process. The simplest comparisons are to measure improvement (or lack of improvement) from an earlier period. Decision makers are less well informed by absolute values than by trends and should be most interested in *why* the trend is as it is. That is the basis for management action.

Management Levels and Responsibilities

Mission Managers: use tactics of implementing particular program component.
- resources available
- planned outputs produced
- financial accountability assured
- efficiency

Mission leadership or Bureau managers: implement entire program or major components — a range of activities, number of sites, etc. aimed at achieving a larger strategic objective.
- summary information on program inputs
- comparative information across sites and on achievement of outcomes
- information on program impact to validate significance of their program strategy

Senior A.I.D. management: concerned with strategic management; must articulate agency mission and values and communicate them internally and externally; clarify policy presumptions underlying mission, identify strategic objectives and program initiatives through which the mission will be achieved.
- summary information on program efficiency and effectiveness
- outcome information
- identification of emerging implementation problems and how to address them
- comparative information on program outcomes and impact
- information on context and trends

CDIE: concerned with leading and managing an overall information management strategy for A.I.D.
- technical assistance to information management initiatives in missions and, by extension, to host country counterparts
- development or adaptation of improved technologies for automated information access and management.

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III. SUMMARY: WHAT SHOULD A.I.D. DO

A. Key Lessons from Performance Measurement

Drawing from the findings of our inquiry reported in preceding portions of this report, some key lessons applicable to A.I.D. include:

✓ Leadership support is essential; key A.I.D. officials must give visible and credible backing to performance measurement and provide a mandate and resources for its implementation.

✓ Ownership should be elicited at all management levels; "champions" are needed at the Washington and field Mission levels.[2]

✓ Don't overload expectations; the purpose is not to measure linkages or to draw cause-and-effect conclusions. The performance measurement system is a complement to, not substitute for, impact evaluations.

✓ Involve program managers in developing plans for analysis and actions based on monitoring information.

✓ Train Agency staff in using performance measures; managers not accustomed to using performance data will need to be educated.

✓ Focus on a few key-results areas at each point of management responsibility.

✓ Aspects of performance that can be easily manipulated in the short run should be reported frequently; those less sensitive to program changes should be reported less often.

✓ Give it time. It will take several years to implement a performance measurement system.

✓ Use a small number of indicators and keep the system as simple as possible. Not all potentially relevant information contributes to improving a decision; not all information is eventually even worth knowing (Chambers, 1981).

✓ Do not create a measurement bureaucracy!

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[2] The system needs *information entrepreneurs*—persons who can instill enduring enthusiasm for effective use of performance measurement information and who possess the technical and organizational skills to support the installation and maintenance of effective field capabilities in performance measurement (Betts and VanSant, 1985).

B. Action Steps for A.I.D.

Our review of performance measurement practice outside A.I.D. has suggested several recommendations as next steps the agency should seriously consider. In this section we briefly present each recommendation, along with a suggested action item to implement the recommendation. Both are listed in Exhibit 7.

Exhibit 7

Recommendations and Action Items for A.I.D.

Recommendation	Action Item
Develop A.I.D.-relevant performance indicators	✓ Determine "results" that fit A.I.D.
Encourage total leadership involvement	✓ Establish Performance Management Steering Committee
Recruit and promote managers who manage for results	✓ Look for direct evidence in recruitment and personnel reviews
Train managers to use performance data	✓ Initiate a knowledge-attitudes-practices (KAP) performance management training program
Employ a performance manager	✓ Make position a direct hire with time allocated specifically to performance measurement
Maintain data quality control	✓ Institute routine data audits
Identify A.I.D. bureaucratic barriers to performance management	✓ Conduct a barrier study

Does it make sense to hold A.I.D. as an agency *directly* accountable for producing people-level impacts, such as reduced infant mortality in recipient countries? It would, if A.I.D. staff were directly involved in designing and implementing family planning program interventions in these countries. But that is not what they do; instead, they work with counterpart agency staff who themselves have the direct responsibility for service delivery. A.I.D. can, on the other hand, be held directly accountable for managing for results: for routinely using performance data to monitor and evaluate counterpart performance to ensure that foreign assistance is used in a cost-effective way.

► Action: Develop result indicators that fit more closely what A.I.D. management and staff do, that reflect their responsibility to manage for results.

Performance management will take hold in A.I.D. in direct proportion to the degree to which there is total management involvement. This means that managers at all levels of the agency—but especially at the senior levels—have to be involved actively in the design and implementation of the system, rather than assigning full responsibility to some lower-level, low-visibility office.

► Action: Create a Performance Management Steering Committee of high-level A.I.D. managers to *champion* the performance measurement process and make sure that it is taken seriously and used.

One sure way to promote the cause is to recruit and promote managers based on hard evidence of a capability for and commitment to performance management, to using performance data to manage. As part of their annual review, for example, managers would be asked to document examples of their having used performance data (and the data used) to run their operations.

► Action: Require direct evidence from job candidates and managers in annual reviews of their using performance data to carry out their management responsibilities.

One of the most striking findings of the survey was the need for manager training in the use of performance data; managers need data for decisions, but equally important, they need to know how to use these data. The evidence suggests that many do not. The training needs to focus on three interrelated concerns: managers' *knowledge* about the uses of performance data to manage; managers' *attitudes* towards the use of performance data; and the *practice* of routinely using performance data as a management tool.

► Action: Design and field test a knowledge-attitudes-practices training program for managers in the use of performance management data.

We noted previous research suggesting the potential value of having an information broker in an agency to link people with the information they need to do their jobs. In the context of performance management within A.I.D., we recommend creation of the role of *performance manager* within each of the various parts of the agency (e.g., CDIE, program bureaus, Missions) responsible for programmatic or performance measurement and evaluation activities. This person would be responsible for maintaining a performance management (i.e., performance monitoring and impact evaluation) data base and, more importantly, bringing people in contact with, and helping them use, the data in it to manage for results.

► Action: Use specific time allocation of a direct-hire position for role of the performance manager.

A key role for the performance manager would be to maintain data quality control within the performance management data. We noted above the potential corruptibility of performance data. The quality control procedures would seek to ensure the timeliness, reliability, relevance, and cost-effectiveness of data collection and data use procedures. In practice, this will entail periodic data

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checks on counterpart data supplied to the Mission, because these data are relied upon so heavily by Mission staff to manage their programs.

- ► Action: Develop data quality control procedures, such as periodic data audits, to be applied by outside experts to promote objectivity in and credibility for the process.

Initiating change in a large organization, such as a mandate to manage for results, is bound to generate a certain amount of resistance from the established bureaucracy. Change can be threatening. Advance information on the key potential bureaucratic barriers, such as recruitment policies or program oversight regulations, can reveal problem areas and suggest ways to effectively deal with them proactively.

- ► Action: Conduct a *Barriers to Managing for Results in A.I.D.* study, and use it to develop an implementation strategy for moving to performance management within the agency.

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ANNEXES

Annex 1

Recent History of Performance Measurement
in the U.S. Federal Government

Several ongoing and recent U.S. Government initiatives were designed to encourage the use of various kinds of performance indicators and measures by federal agencies.

Since 1973, the Bureau of Labor Statistics (BLS) has collected productivity data from all federal agencies under the *Federal Productivity Measurement System*. BLS calculates an aggregate output per employee per year, for each federal bureau. Data are published approximately one year after the end of the fiscal year and thus are more useful for examining long-term trends in agency performance than for evaluating specific programs.

In addition, annual bureau budget requests to the Office of Management and Budget (OMB) and Congress must contain historical and projected workload data in support of budgeted activities. The data are used to justify funding requests based on increases in workload (but don't necessarily measure effectiveness or productivity).

The *Federal Managers' Financial Integrity Act* of 1982 requires federal agencies to evaluate their internal control and financial management systems—relative to standards set by the General Accounting Office (GAO)—in an annual report to the President. The standards address the accuracy, timeliness, and reliability of data.

The *Productivity Improvement Program* was initiated in 1986 with the goal of increasing productivity by 20 percent between 1986 and 1992 (3 percent per year) in selected federal agency activities. Focus was on improving efficiency, measuring outputs and related costs, and improving governmental functions.

The *Total Quality Management (TQM)* initiative, which is an integrated management system for achieving customer satisfaction, expanded the focus to include quality improvement. TQM efforts began in 1987 as federal leaders consulted with private sector officials. The Federal Quality Institute was created as a source of quality awareness training and consultation and a clearinghouse and referral source for TQM information. The Government has promoted the voluntary adoption of TQM through awards programs and an annual conference on Federal Quality and Productivity Improvement. Many agencies are now tying in their performance measurement initiatives to their existing TQM efforts.

The *Chief Financial Officers (CFO) Act* of 1990 requires selected agencies to provide annual audited financial reports that emphasize financial and program performance measures. The Act recognizes the need for reliable and consistent financial information as the basis for sound indicators. It also requires a government-wide, 5-year financial management plan.

The CFO Act does not mandate specific measures but requires each agency to develop its own financial and program-specific measures and to submit these in its audited financial statements to the agency's Inspector General and then to OMB and Congress. It puts each agency's CFO in

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charge of selecting the performance indicators and measures. In the first year of CFO implementation, agencies must use indicators supported by existing data bases, but these can be replaced as new data are collected.

The *Interagency Committee on Performance Measurement* was formed in December 1991 to address the requirements of the CFO Act. It includes representatives from the largest federal agencies, including Agriculture, the Department of Health and Human Services, and Energy. It meets monthly to exchange information on developing performance indicators. It has developed "model" performance indicators and identified obstacles to the development of indicators.

OMB initiated another interagency group in February 1992 to identify program and financial performance indicators and measures that will be responsive to the CFO Act. This committee is developing agency-specific indicators as well as crosscutting measures common to several agencies for the 14 "substantially commercial" concerns that the CFO Act covers.

Congress is currently considering legislation originally introduced by Senator Roth as S.20, the *Government Performance and Results Act* of 1992. The Act has already been passed by the Senate and is expected to pass the House and be signed into law by summer of 1993.

According to Senator Roth, this legislation would institute several "major reforms in the way the federal government does business" (Roth, 1992, p. 102):

- *Results-based legislation:* All authorization, reauthorization. and appropriations bills introduced by Congress must specify measurable, objective, quantifiable goals and standards expected to be achieved.

- *Performance planning:* Each agency must develop a detailed performance plan that shows the hierarchy of outcome-oriented goals for each major activity needed to achieve the congressionally mandated results.

- *Performance reporting:* Each agency must publish an annual performance report that compares actual results with original goals, for the past year and three prior years. As with financial reports, these performance reports will be audited by each agency's Inspector General and reviewed by Congressional oversight committees, GAO, OMB, and other interested groups.

- *Performance-based budgeting:* Each agency must incorporate performance goals directly into its federal budget for all major expenditure categories. These indicators should be used not simply for planning but for managing at every level of operation.

In support of this legislation soon after it was introduced, Congress directed the GAO to survey the largest 104 federal agencies to determine the kinds of performance measures currently in use. The *GAO Survey of Agency Use of Program Performance Measures* found that although most agencies measure some performance, officials were not satisfied with the data especially as they related to making budget decisions, managing programs, or assessing accountability. GAO testified before Congress in May 1992 that changing the government's focus from ensuring that funds are

spent properly to managing dollars to produce agreed-upon results will be difficult and gradual, and will require a strong commitment from those involved.

OMB, GAO, and Treasury officials have visited state, local, and foreign governments to review their performance measurement systems and to determine the elements necessary for successful performance measurement, such as using strategic plans to define goals and objectives, and holding managers accountable for program performance.

OMB has also participated in an Organization for Economic Cooperation and Development (OECD) experts group on a study of performance measurement in OECD member countries that resulted in comparative case studies of performance measurement systems in other countries.

The Treasury's Financial Management Service, through its Project USA, has worked closely with the Private Sector Council (PSC) to develop models of excellent management practices, including performance measurement, for the financial improvement of the federal government. Project USA conducted a *Survey of Private Sector Council Performance Measures* in 1992 to discover some of the best practices in performance measurement in corporations and to solicit suggestions for applying performance measurement to the federal government.

The National Academy of Public Administration (NAPA), a nonprofit group chartered by Congress to improve all levels of government, has created the *Alliance for Redesigning Government* to tie together reform efforts at the federal, state, and local levels. David Osborne, author of *Reinventing Government*, chairs this alliance. NAPA also conducts pilot projects with federal agencies (such as the Department of Education, currently) to develop performance measures at both the program level and the agency level. NAPA has coordinated monthly performance measurement lunchtime sessions for the past year.

In addition, the Clinton Administration has a "reinventing government" task force headed by the Vice-President. Mr. Gore's *Performance Review Team* consists of representatives from each federal department, as well as foundation officials and academic experts, including NAPA. The task force members are committed full-time for 4 to 6 months to serve on this project. They are looking at "best practices" of excellence in government and at barriers to efficient service delivery. The goal is to streamline the federal government to make it more responsive to citizens, in part by increasing direct citizen contact and cutting out middle management. The team will produce a report by fall of 1993.

Interview Framework and Protocol

PREAMBLE: *A.I.D. is in the process of developing a performance measurement system to support its strategic management initiative under the PRISM project. PRISM stands for "Performance Information for Strategic Management." A key part of this process is understanding the actual and potential use of program performance information—who is most likely to use the information, and how will they use it? The clear intention is to maximize the use of performance data to promote strategic management. To that end, we are talking to people outside of A.I.D., in domestic U.S. agencies and overseas, to learn about effective ways to achieve widespread use of performance information on program processes and results. We are particularly interested in specific examples of where performance data was used to improve program management. We'll start by discussing how your agency defines performance measurement.*

I. **Action Component (Information to Use)**

   A. Performance Measurement Context

      1. Is your organization utilizing performance measurement systems to monitor programs/projects? If not, why not?

      2. How do you define Performance Measurement?

   B. Matching Information to Decision-Making Needs

      1. Are decision makers involved with deciding what kinds of data to gather and monitor?

      2. How do you serve the needs of both managers and persons with oversight or monitoring responsibility with the same evaluative information?

      3. What facilitates effective information use? What constrains effective use?

      4. Give examples of effective information use. What promoted its use?

   C. Reward Systems and Link to Performance

      1. What incentives are there for program/project managers to make use of the data information system?

2. *Give specific examples of how your information system has improved program/project performance.*

D. Addressing Stakeholder Interests

1. *What kinds of stakeholders have an interest in the findings of your performance evaluation system?*

2. *Is the performance evaluation system designed to meet the needs of these stakeholders?*

E. Aggregation of Data from Different Locations and Approaches

1. *How do you compare and/or aggregate information from different field locations or programs?*

2. *How do you compare and/or aggregate information deriving from different indicators or evaluation approaches?*

II. Analysis Component (Data to Information)

A. Developing Benchmarks

1. *What standards/targets do you use to measure whether a program/project is achieving its goals and objectives?*

2. *Describe the process for developing these standards/targets.*

B. Methodology

1. *Is your performance evaluation system relatively easy to use?*

2. *Can it be adapted to monitor programs/projects across different sectors?*

D. Measuring People Impact

1. *How do you measure project/program impact at the people-level?*

2. *Please give specific examples.*

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E. Communication and Presentation

   1. *How is the data translated into information that can be effectively utilized by project managers?*

   2. *What reporting/presentation formats do you find most effective?*

III. Data Component (Measurement to Data)

A. Indicators

   1. *What are the general criteria you use to select performance indicators?*

   2. *Please give examples of sectors in which you apply performance measures (these examples could be organized according to PRISM clusters).*

B. Data

   1. *Briefly describe some of the more innovative approaches you have developed to collect data.*

   2. *How do you ensure that the data gathered are of high quality (e.g., relevant, accurate, timely, objective, and usable)?*

Annex 3

Persons Contacted

Name	Organization
Bamberger, Michael	World Bank
Bonerjee, Mr.	UNDP
Borton, Nan	Interaction
Britan, Gerry	USAID-CDIE-SDS
Brownstein, Charles	National Science Foundation
Caiden, Gerald	University of Southern California
Cailloux, Michele	Canada-CIDA
Campbell, Michael	Council of Government Policy Advisors
Cannon, Paul	United Kingdom-National Accounting Office
Corbeil, Ron	Canada-CIDA-Office of the Comptroller General
Davies, Graham	United Kingdom-Cabinet Office (OMCS)
DiGiavanno, Frank	Ford Foundation
Fantone, Denise	U.S. General Accounting Office
Gatto, Bob	Canada-Office of Statistics
Green, Karen	U.S. Department of Labor
Groszyk, Walter	U.S. Office of Management and Budget
Guererro, Pablo	World Bank
Hatry, Harry	Urban Institute
Hoffman, Susan	U.S. Department of Education
Joyce, Phil	U.S. Congressional Budget Office
Kamensky, John	U.S. General Accounting Office
Lawrence, John	UNDP
Long, Carolyn	Interaction
Morris, John	United Kingdom-ODA
Pedone, Karen	U.S. Department of Treasury
Powers, Terry	Inter-American Development Bank
Reid, Gary	World Bank
Salop, Joanne	World Bank
Schroeder, Larry	Syracuse University
Scioli, Frank	National Science Foundation
Sonnichsen, Richard	FBI
Svenaeus, Lena	Sweden-Embassy in Ottawa, Canada
Tessauro, Julie	U.S. General Accounting Office
Tuck, Nancy	U.S. Department of Treasury
Vreeland, Nena	USAID-CDIE
Weinberg, Emil	Inter-American Development Bank
Wholey, Joseph	University of Southern California
Wilson, Gale	Fairfield, CA (former City Manager)
Winkler, Don	World Bank

Wye, Chris	National Academy of Public Administration
Zaleski, Gary	U.S. Department of Treasury
Zavada, David	U.S. Office of Management and Budget

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